ISTRUZIONI PER L'USO E LA MANUTENZIONE
OPERATION AND SERVICE MANUAL
INSTRUCTIONS POUR L'EMPLOI ET L'ENTRETIEN
GEBRAUCHS- UND WARTUNGSANWEISUNGEN
INSTRUCCIONES PARA L' USO Y MANTENIMIENTO
INSTRUKTIONER FÖR ANVÄNDNING OCH UNDERHÅLL
KÄYTTÖ- JA HUOLTO-OHJEET
INSTRUKTIONER VEDRØRENDE BRUG OG VEDLIGEHOLDELSE
INSTRUKSJONER FOR BRUK OG VEDLIKEHOLD

ABBATTITORI E ABBATTITORI/CONGELATORI DA 100 KG 20 GN 1/1 - 180 KG 20 GN 2/1 ELETTRONICI

100 KG 20 GN 1/1 - 180 KG 20 GN 2/1 ELECTRONIC BLAST CHILLERS AND BLAST CHILLERS/ FREEZERS

CELLULES DE REFROIDISSEMENT RAPIDE ET POUR CELLULES DE REFROIDISSEMENT RAPIDE/CONGÉLATION ÉLECTRONIQUES 100 KG 20 GN 1/1 - 180 KG 20 GN 2/1

ELEKTRONISCHE SCHOCKKÜHLER UND SCHOCKKÜHLER/SCHOCKGEFRIERER ZU 100 KG 20 GN 1/1 - 180 KG 20 GN 2/1

ABATIDORES Y ABATIDORES/CONGELADORES DE 100 KG 20 GN 1/1 - 180 KG 20 GN 2/1 ELECTRÓNICOS

ELEKTRONISKA BLÄSTERKYLARE OCH BLÄSTERKYLARE/FRYSAR PÅ 100 KG 20 GN 1/1 - 180 KG 20 GN 2/1

ELEKTRONISET 100 KG 20 GN 1/1 - 180 KG 20 GN 2/1 TEHOJÄÄHDYTYSKAAPIT JA TEHOJÄÄHDYTYS/PAKASTUSKAAPIT

ELEKTRONISKE BLÆSEKØLERE OG BLÆSEKØLERE/FRYSERE MED KAPACITET PÅ 100 KG 20 GN 1/1 - 180 KG 20 GN 2/1

ELEKTRONISKE BLÅSEKJØLERE OG BLÅSEKJØLERE/FRYSEBOKSER PÅ 100 KG 20 GN 1/1 - 180 KG 20 GN 2/1

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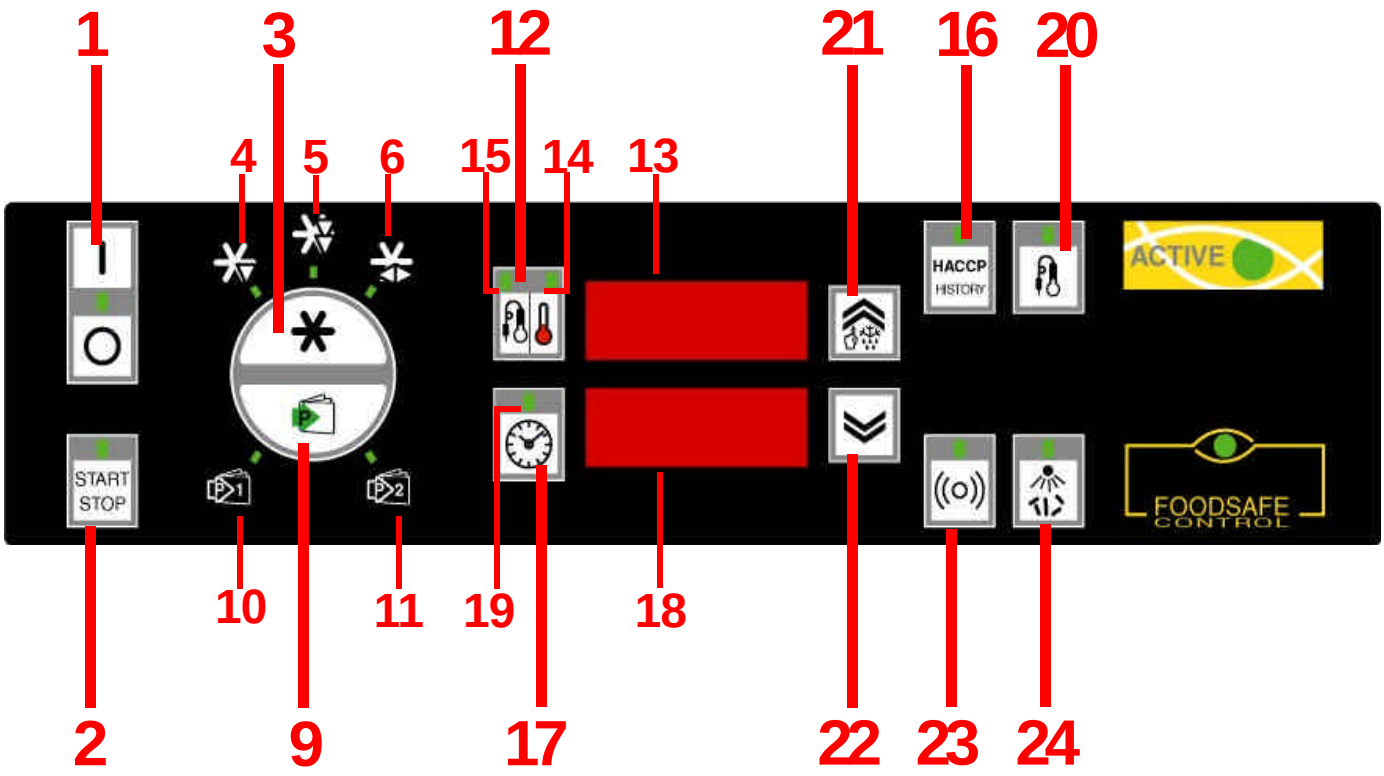
PANNELLO COMANDI MODELLI POSITIVI
CONTROL PANEL POSITIVE TEMP. MODELS
DISPOSITIVO DE MANDO PARA MODELO POSITIVOS
PANNEAU DE COMMANDES MODELES POSITIFS
BEDIENBLENDE BEI PISTIVMODELLEN

CONTROL PANEL POSITIVE TEMP. MODELS
OHJ.TAULU TEHOJÄÄHDYTYSKAAPEISSA
KONTROLPANEL KØLEMODELLER
KONTROLLPANEL FOR KJØLEMODELLER



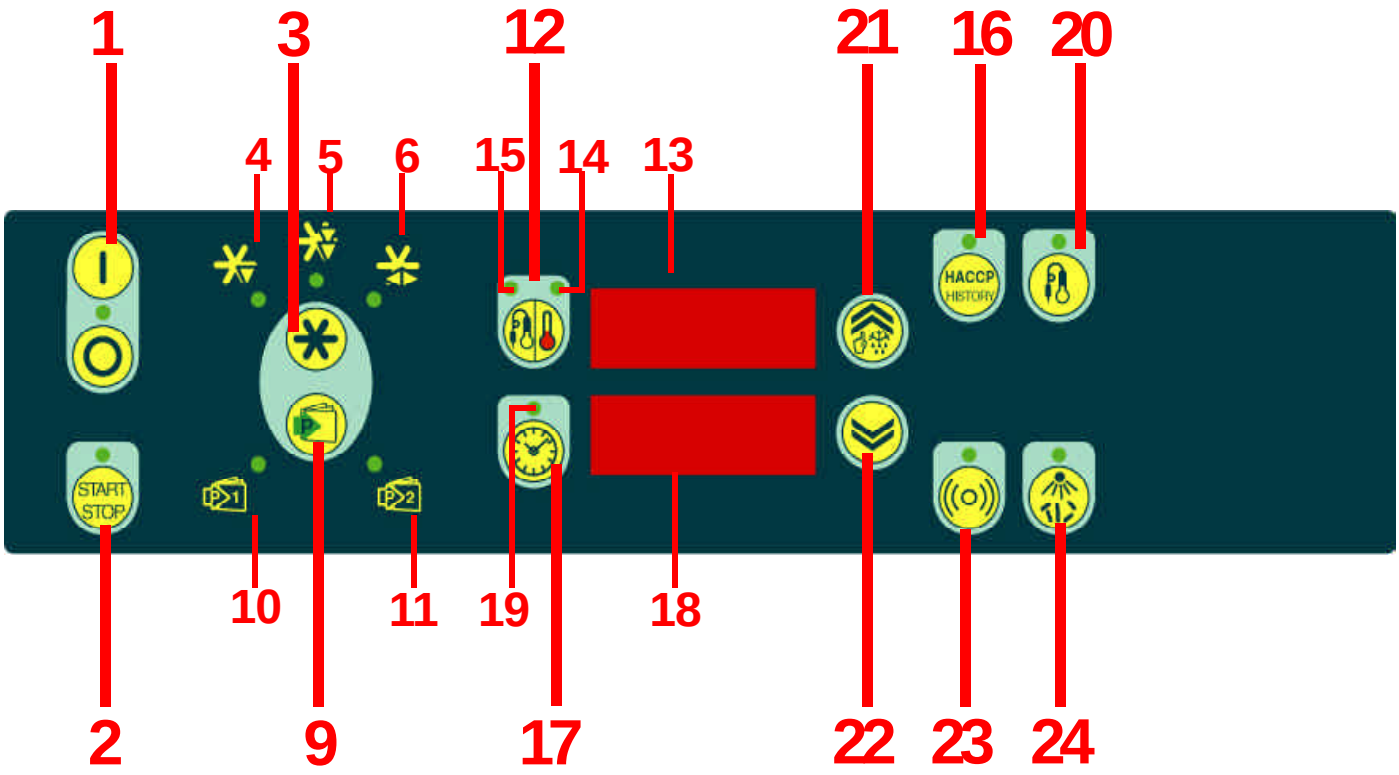


FIG.1

IT

1 - Interruttore ON/OFF
2 - Tasto "start/stop ciclo"
3 - Tasto "selezione ciclo"
4 - Led "ciclo abbattimento SOFT"
5 - Led "ciclo abbattimento HARD"
6 - Led "ciclo mantenimento POSITIVO"
9 - Tasto "selezione programma"
10 - Led "programma 1"
11 - Led "programma 2"
12 - Tasto "temperatura"
13 - Display temperatura
14 - Led "temperatura sonda cella"
15 - Led "temperatura sonda spillone"
16 - Tasto HACCP/HISTORY
17 - Tasto "tempo"
18 - Display tempo
19 - Led "ciclo a tempo"
20 - Tasto "spillone"
21 - Tasto doppia funzione:
- UP
- "Sbrinamento manuale"
22 - Tasto DOWN
23 - Tasto "ALARM SERVICE"
24 - Tasto "ciclo germicida"

GB

1 - ON/OFF switch
2 - "Cycle start/stop" button
3 - "Select cycle" button
4 - "SOFT chilling cycle" indicator light
5 - "HARD chilling cycle" indicator light
6 - "POSITIVE maintenance cycle" indicator light
9 - "Select program" button
10 - "Program 1" indicator light
11 - "Program 2" indicator light
12 - "Temperature" button
13 - Temperature display
14 - "Cell probe temperature" indicator light
15 - "Core probe temperature" indicator light
16 - HACCP/HISTORY button
17 - "Time" button
18 - Time display
19 - "Timed cycle" indicator light
20 - "Core probe" button
21 - Double function button:
- UP
- "Manual defrosting"
22 - DOWN button
23 - "SERVICE ALARM" BUTTON
24 - "Germicidal cycle" button

FR

1 - Interrupteur ON/OFF
2 - Touche "start/stop du cycle"
3 - Touche "sélection du cycle"
4 - Voyant "cycle de refroidissement SOFT"
5 - Voyant "cycle de refroidissement HARD"
6 - Voyant "cycle de maintien POSITIF"
9 - Touche "sélection du programme"
10 - Voyant "programme 1"
11 - Voyant "programme 2"
12 - Touche "température"
13 - Afficheur température
14 - Voyant "température sonde cellule"
15 - Voyant "température sonde à piquer"
16 - Touche HACCP/HISTORY
17 - Touche "temps"
18 - Afficheur temps
19 - Voyant "cycle temporisé"
20 - Touche "sonde à piquer"
21 - Touche double fonction :
- UP
- "Dégivrage manuel"
22 - Touche DOWN
23 - Touche "ALARM SERVICE"
24 - Touche "cycle germicide"

DE

1 - Schalter ON/OFF
2 - Taste "Start/Stop" (Zyklusstart/-stopp)
3 - Taste "Zyklusauswahl"
4 - Led "SOFT-Schockkühlzyklus"
5 - Led "HARD-Schockkühlzyklus"
6 - Led "POSITIVER Kühlhaltungszyklus"
9 - Taste "Programmauswahl"
10 - Led "Programm 1"
11 - Led "Programm 2"
12 - Taste "Temperatur"
13 - Temperatur-Display
14 - Led "Temperatur Kühlzellensonde"
15 - Led "Temperatur Kerntemperaturfühler"
16 - Taste HACCP/HISTORY
17 - Taste "Zeit"
18 - Zeit-Display
19 - Led "zeitgesteuerter Zyklus"
20 - Taste "Kerntemperaturfühler"
21 - Taste mit zwei Funktionen:
- UP
- "Manuelle Abtauung"
22 - Taste DOWN
23 - Taste "ALARM SERVICE"
24 - Taste "Keimtötungszyklus"

ES

1 - Interruptor ON/OFF
2 - Tecla "start/stop ciclo"
3 - Tecla "selección ciclo"
4 - Led "ciclo enfriamiento SOFT"
5 - Led "ciclo enfriamiento HARD"
6 - Led "ciclo conservación POSITIVA"
9 - Tecla "selección de programas"
10 - Led "programa 1"
11 - Led "programa 2"
12 - Tecla "temperatura"
13 - Display temperatura
14 - Led "temperatura sensor celda"
15 - Led "temperatura sensor aguja"
16 - Tecla HACCP/HISTORY
17 - Tecla "tiempo"
18 - Display tiempo
19 - Led "ciclo temporizado"
20 - Tecla "aguja"
21 - Tecla doble función:
- UP
- "Descongelación manual"
22 - Tecla DOWN
23 - Tecla "ALARM SERVICE"
24 - Tecla "ciclo germicida"

SE

1 - Brytare ON/OFF
2 - Knappen "Cykel start/stop",
3 - Knappen "val av cykel"
4 - "SOFT-kylningscykel", indikatorlampa
5 - "HARD-kylningscykel", indikatorlampa
6 - "POSTIV bibehållandecykel", indikatorlampa
9 - Knappen "val av program"
10 - "Program 1", indikatorlampa
11 - "Program 2", indikatorlampa
12 - Knappen "temperatur"
13 - Temperatur-display
14 - "Utrymmestemperatursond", indikatorlampa
15 - "Kärntemperatursond", indikatorlampa
16 - Knappen HACCP/HISTORY
17 - "Tidsknappen"
18 - Tids-display
19 - "Tidsbegränsad cykel", indikatorlampa
20 - Knappen "kärntemperatursond"
21 - Dubbelfunktionsknappen:
- UP
- "Manuell avfrostning"
22 - Knappen DOWN
23 - Knappen "ALARM SERVICE"
24 - Knappen "bakteriedödande cykel"

FI

1 - Virtakytkin
2 - Toiminnon käynnistyspainike
3 - Toiminnon valintapainike
4 - "SOFT" jäähdytyksen merkkivalo
5 - "HARD" jäähdytyksen merkkivalo
6 - Positiivisen (yli nolla) säilytyksen merkkivalo
9 - Ohjelman valintapainike
10 - Ohjelman 1 merkkivalo
11 - Ohjelman 2 merkkivalo
12 - Lämpötilapainike
13 - Lämpötila-näyttö
14 - Kaapin lämpötila-anturin merkkivalo
15 - Lämpömittarin anturin merkkivalo
16 - HACCP/HISTORIA-painike
17 - Aikapainike
18 - Aika-näyttö
19 - Ajastetun toiminnon merkkivalo
20 - Lämpömittarin painike
21 - Kaksoistoimintopainike:
- YLÖS
- "Manuaalinen sulatus"
22 - ALAS-painike
23 - HUOLTOHÄLYTYS-painike
24 - Bakteerintuhotoiminnon painike

DK

1 - Tænd/sluk-kontakt
2 - Tast for "cyklus start/stop"
3 - Tast for "valg af cyklus"
4 - Kontrollampe for "SOFT nedkølingscyklus"
5 - Kontrollampe for "HARD nedkølingscyklus"
6 - Kontrollampe for "POSITIV konserveringscyklus"
9 - Tast for "programvalg"
10 - Kontrollampe for "program 1"
11 - Kontrollampe for "program 2"
12 - "Temperatur"-tast
13 - Temperaturdisplay
14 - Kontrollampe for "celletemperatur"
15 - Kontrollampe for "kernetemperatur"
16 - Tast for HACCP/HISTORY
17 - "Timer"-tast
18 - Timerdisplay
19 - Kontrollampe for "timercyklus"
20 - Tast for "kernetemperaturføler"
21 - Tast med dobbelt funktion:
- UP
- "Manuel afrimning"
22 - NED-tast
23 - Tast for "SERVICEALARM"
24 - Tast for "sterilisationscyklus"

NO

1 - Bryter for ON/OFF (av/på)
2 - Tast for "start/stopp syklus"
3 - Tast for "valg av syklus"
4 - Indikatorlampe for "SOFT kjølesyklus"
5 - Indikatorlampe for "HARD kjølesyklus"
6 - Indikatorlampe for "POSITIV konserveringssyklus"
9 - Tast for "valg av program"
10 - Indikatorlampe for "program 1"
11 - Indikatorlampe for "program 2"
12 - Tast for "temperatur"
13 - Display for temperatur
14 - Indikatorlampe for "temperatur cellesonde"
15 - Indikatorlampe for "temperatur kjernetermometer-sonde"
16 - Tast for HACCP/HISTORY
17 - Tast for "tidsinnstilling"
18 - Display for tidsinnstilling
19 - Indikatorlampe for "tidsinnstilt syklus"
20 - Tast for "kjernetermometer"
21 - Tast med dobbel funksjon:
- UP
- "Manuell avriming"
22 - DOWN
23 - Tast for "SERVICE-ALARM"
24 - Tast "bakteriedrepende syklus"

PANNELLO COMANDI POSITIVI/CONGELATORI
CONTROL PANEL POSITIVE TEMP./FREEZER MODELS
DISPOSITIVO DE MANDO PARA MODELO POSITIVOS/ CONGELADORES
PANNEAU DE COMMANDES MODELES POSITIFS/DE CONSERVATION

BEDIENBLENDE BEI POSITIV-UND KONSERVIERUNGS-MODELLEN
CONTROL PANEL POSITIVE TEMP./FREEZER MODELS
OHJ.TAULU TEHOPAKASTUSKAAPEISSA
KONTROLPANEL KØLE-./FRYSERMODELLER
KONTROLLPANEL FOR KJØLE-/FRYSEMODELLER

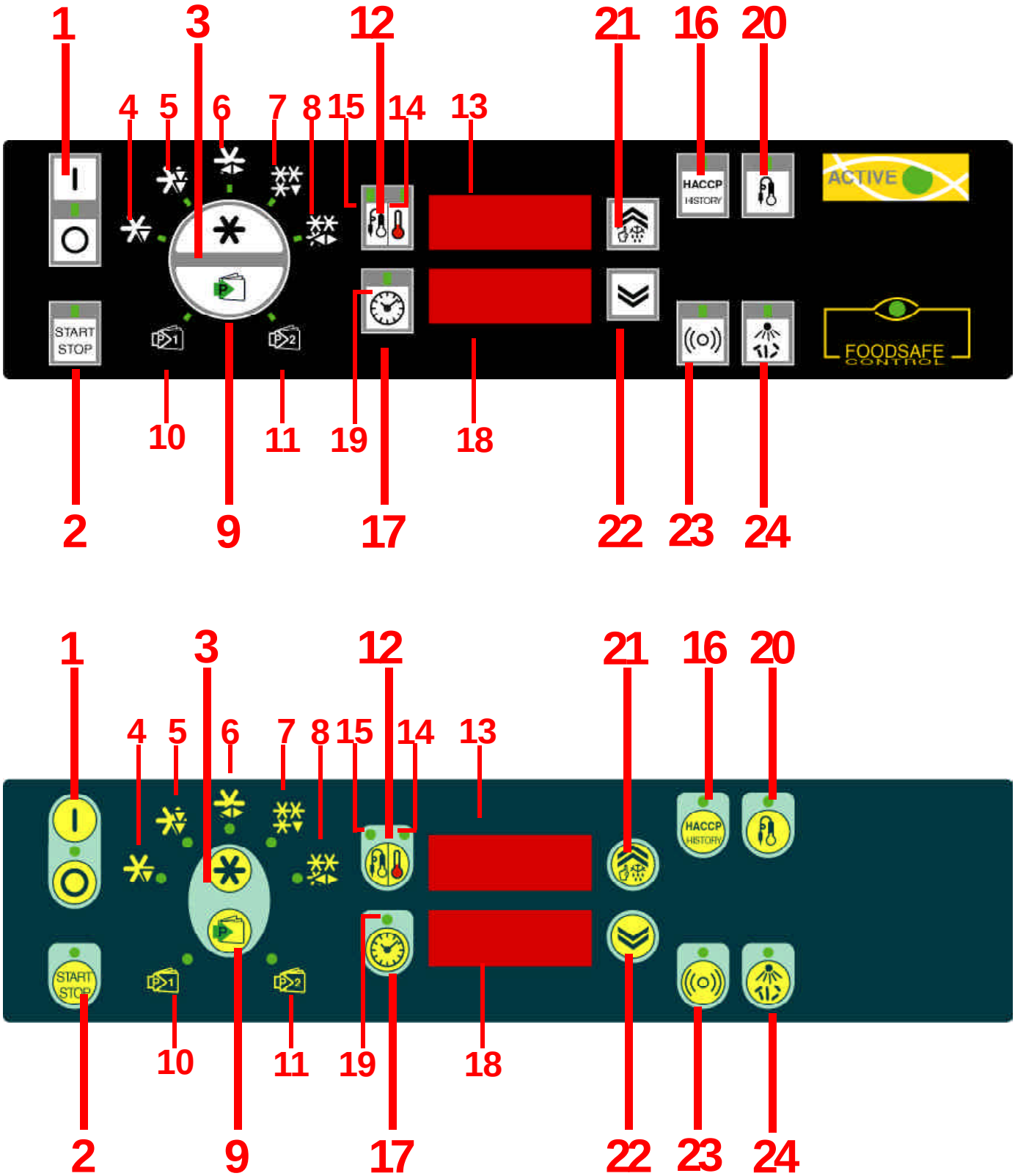


FIG.2

IT

1 - Interruttore ON/OFF
2 - Tasto "start/stop ciclo"
3 - Tasto "selezione ciclo"
4 - Led "ciclo abbattimento SOFT"
5 - Led "ciclo abbattimento HARD"
6 - Led "ciclo mantenimento POSITIVO"
7 - Led "ciclo abbattimento NEGATIVO o CONGELAMENTO"
8 - Led "ciclo mantenimento NEGATIVO"
9 - Tasto "selezione programma"
10 - Led "programma 1"
11 - Led "programma 2"
12 - Tasto "temperatura"
13 - Display temperatura
14 - Led "temperatura sonda cella"
15 - Led "temperatura sonda spillone"
16 - Tasto HACCP/HISTORY
17 - Tasto "tempo"
18 - Display tempo
19 - Led "ciclo a tempo"
20 - Tasto "spillone"
21 - Tasto doppia funzione:
- UP
- "Sbrinamento manuale"
22 - Tasto DOWN
23 - Tasto "ALARM SERVICE"
24 - Tasto "ciclo germicida"

GB

1 - ON/OFF switch
2 - "Cycle start/stop" button
3 - "Select cycle" button
4 - "SOFT chilling cycle" indicator light
5 - "HARD chilling cycle" indicator light
6 - "POSITIVE maintenance cycle" indicator light
7 - "NEGATIVE chilling or FREEZING cycle" indicator light
8 - "NEGATIVE maintenance cycle" indicator light
9 - "Select program" button
10 - "Program 1" indicator light
11 - "Program 2" indicator light
12 - "Temperature" button
13 - Temperature display
14 - "Cell probe temperature" indicator light
15 - "Core probe temperature" indicator light
16 - HACCP/HISTORY button
17 - "Time" button
18 - Time display
19 - "Timed cycle" indicator light
20 - "Core probe" button
21 - Double function button:
- UP
- "Manual defrosting"
22 - DOWN button
23 - "SERVICE ALARM" BUTTON
24 - "Germicidal cycle" button

FR

1 - Interrupteur ON/OFF
2 - Touche "start/stop du cycle"
3 - Touche "sélection du cycle"
4 - Voyant "cycle de refroidissement SOFT"
5 - Voyant "cycle de refroidissement HARD"
6 - Voyant "cycle de maintien POSITIF"
7 - Voyant "cycle de refroidissement NÉGATIF ou CONGÉLATION"
8 - Voyant "cycle de maintien NÉGATIF"
9 - Touche "sélection du programme"
10 - Voyant "programme 1"
11 - Voyant "programme 2"
12 - Touche "température"
13 - Afficheur température
14 - Voyant "température sonde cellule"
15 - Voyant "température sonde à piquer"
16 - Touche HACCP/HISTORY
17 - Touche "temps"
18 - Afficheur temps
19 - Voyant "cycle temporisé"
20 - Touche "sonde à piquer"
21 - Touche double fonction :
- UP
- "Dégivrage manuel"
22 - Touche DOWN
23 - Touche "ALARM SERVICE"
24 - Touche "cycle germicide"

DE

1 - Schalter ON/OFF
2 - Taste "Start/Stop" (Zyklusstart/-stopp)
3 - Taste "Zyklusauswahl"
4 - Led "SOFT-Schockkühlzyklus"
5 - Led "HARD-Schockkühlzyklus"
6 - Led "POSITIVER Kühlhaltungszyklus"
7 - Led "NEGATIVER Schockkühlzyklus oder SCHOCKFROSTEN"
8 - Led "NEGATIVER Kühlhaltungszyklus"
9 - Taste "Programmauswahl"
10 - Led "Programm 1"
11 - Led "Programm 2"
12 - Taste "Temperatur"
13 - Temperatur-Display
14 - Led "Temperatur Kühlzellensonde"
15 - Led "Temperatur Kerntemperaturfühler"
16 - Taste HACCP/HISTORY
17 - Taste "Zeit"
18 - Zeit-Display
19 - Led "zeitgesteuerter Zyklus"
20 - Taste "Kerntemperaturfühler"
21 - Taste mit zwei Funktionen:
- UP
- "Manuelle Abtauung"
22 - Taste DOWN
23 - Taste "ALARM SERVICE"
24 - Taste "Keimtötungszyklus"

ES

1 - Interruptor ON/OFF
2 - Tecla "start/stop ciclo"
3 - Tecla "selección ciclo"
4 - Led "ciclo enfriamiento SOFT"
5 - Led "ciclo enfriamiento HARD"
6 - Led "ciclo conservación POSITIVA"
7 - Led "ciclo enfriamiento NEGATIVO o CONGELACIÓN"
8 - Led "ciclo conservación NEGATIVA"
9 - Tecla "selección de programas"
10 - Led "programa 1"
11 - Led "programa 2"
12 - Tecla "temperatura"
13 - Display temperatura
14 - Led "temperatura sensor celda"
15 - Led "temperatura sensor aguja"
16 - Tecla HACCP/HISTORY
17 - Tecla "tiempo"
18 - Display tiempo
19 - Led "ciclo temporizado"
20 - Tecla "aguja"
21 - Tecla doble función:
- UP
- "Descongelación manual"
22 - Tecla DOWN
23 - Tecla "ALARM SERVICE"
24 - Tecla "ciclo germicida"

SE

1 - Brytare ON/OFF
2 - Knappen "Cykel start/stop",
3 - Knappen "val av cykel"
4 - "SOFT-kylningscykel", indikatorlampa
5 - "HARD-kylningscykel", indikatorlampa
6 - "POSTIV bibehållandecykel", indikatorlampa
7 - Led "NEGATIV blast-kylningscykel, eller blast-FRYSNINGScykel"
8 - "NEGATIV bibehållandecykel", indikatorlampa
9 - Knappen "val av program"
10 - "Program 1", indikatorlampa
11 - "Program 2", indikatorlampa
12 - Knappen "temperatur"
13 - Temperatur-display
14 - "Utrymmestemperatursond", indikatorlampa
15 - "Kärntemperatursond", indikatorlampa
16 - Knappen HACCP/HISTORY
17 - "Tidsknappen"
18 - Tids-display
19 - "Tidsbegränsad cykel", indikatorlampa
20 - Knappen "kärntemperatursond"
21 - Dubbelfunktionsknappen:
- UP
- "Manuell avfrostning"
22 - Knappen DOWN
23 - Knappen "ALARM SERVICE"
24 - Knappen "bakteriedödande cykel"

DK

1 - Tænd/sluk-kontakt
2 - Tast for "cyklus start/stop"
3 - Tast for "valg af cyklus"
4 - Kontrollampe for "SOFT nedkølingscyklus"
5 - Kontrollampe for "HARD nedkølingscyklus"
6 - Kontrollampe for "POSITIV konserveringscyklus"
7 - Kontrollampe for "NEGATIV- eller INDFRYSNINGScyklus"
8 - Kontrollampe for "NEGATIV konserveringscyklus"
9 - Tast for "programvalg"
10 - Kontrollampe for "program 1"
11 - Kontrollampe for "program 2"
12 - "Temperatur"-tast
13 - Temperaturdisplay
14 - Kontrollampe for "celletemperatur"
15 - Kontrollampe for "kernetemperatur"
16 - Tast for HACCP/HISTORY
17 - "Timer"-tast
18 - Timerdisplay
19 - Kontrollampe for "timercyklus"
20 - Tast for "kernetemperaturføler"
21 - Tast med dobbelt funktion:
- UP
- "Manuel afrimning"
22 - NED-tast
23 - Tast for "SERVICEALARM"
24 - Tast for "sterilisationscyklus"

FI

1 - Virtakytkin
2 - Toiminnon käynnistyspainike
3 - Toiminnon valintapainike
4 - "SOFT" jäähdytyksen merkkivalo
5 - "HARD" jäähdytyksen merkkivalo
6 - Positiivisen (yli nolla) säilytyksen merkkivalo
7 - PAKASTUKSEN merkkivalo
8 - Negatiivisen (alle nolla) säilytyksen merkkivalo
9 - Ohjelman valintapainike
10 - Ohjelman 1 merkkivalo
11 - Ohjelman 2 merkkivalo
12 - Lämpötilapainike
13 - Lämpötila-näyttö
14 - Kaapin lämpötila-anturin merkkivalo
15 - Lämpömittarin anturin merkkivalo
16 - HACCP/HISTORIA-painike
17 - Aikapainike
18 - Aika-näyttö
19 - Ajastetun toiminnon merkkivalo
20 - Lämpömittarin painike
21 - Kaksoistoimintopainike:
- YLÖS
- "Manuaalinen sulatus"
22 - ALAS-painike
23 - HUOLTOHÄLYTYS-painike
24 - Bakteerintuhotoiminnon painike

NO

1 - Bryter for ON/OFF (av/på)
2 - Tast for "start/stopp syklus"
3 - Tast for "valg av syklus"
4 - Indikatorlampe for "SOFT kjølesyklus"
5 - Indikatorlampe for "HARD kjølesyklus"
6 - Indikatorlampe for "POSITIV konserveringssyklus"
7 - Indikatorlampe for "NEGATIV kjølesyklus eller FRYSING"
8 - Indikatorlampe for "NEGATIV konserveringssyklus"
9 - Tast for "valg av program"
10 - Indikatorlampe for "program 1"
11 - Indikatorlampe for "program 2"
12 - Tast for "temperatur"
13 - Display for temperatur
14 - Indikatorlampe for "temperatur cellesonde"
15 - Indikatorlampe for "temperatur kjernetermometer-sonde"
16 - Tast for HACCP/HISTORY
17 - Tast for "tidsinnstilling"
18 - Display for tidsinnstilling
19 - Indikatorlampe for "tidsinnstilt syklus"
20 - Tast for "kjernetermometer"
21 - Tast med dobbel funksjon:
- UP
- "Manuell avriming"
22 - DOWN
23 - Tast for "SERVICE-ALARM"
24 - Tast "bakteriedrepende syklus"

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IT ..... Pagina 13 - 24

GB ..... Page 25 - 35

FR ..... Page 36 - 47

DE ..... Seite 48 - 59

ES ..... Página 60 - 70

SE ..... Sid. 71 - 82

FI ..... Sivu 83 - 93

DK ..... Side 94 - 104

NO ..... Sidene 105 - 116

GB

A.1 GENERAL INFORMATION

A.1.1 FOREWORD

The purpose of this manual is to provide the necessary information for the correct installation, operation, use and maintenance of the appliance.
Read the instructions in the manual carefully before carrying out any operation whatsoever on the appliance, as they give important information about the standards and rules governing its installation and safe use. Make sure to periodically inform the user about the safety regulations. It is also important to instruct and update the authorized personnel on appliance operation and maintenance.
Failure to observe the instructions in this manual when carrying out any operations with the appliance will relieve the manufacturer of all liability.
No part of this manual may be reproduced.

A.1.2 INTENDED USE AND LIMITATIONS

This appliance has been designed for the blast chilling and/or blast freezing and preservation of foods (it rapidly lowers the temperature of cooked foods in order to preserve their initial qualities over a period of time and guarantee their durability for several days). Any other use is to be considered improper.
ATTENTION: The appliance is not suitable for installation outdoors and/or in environments subject to atmospheric agents (rain, direct sunlight, etc.).
The manufacturer declines all liability for any improper use of the product.

A.1.3 TESTING

Our appliances have been designed and optimised with laboratory testing to give high performance and efficiency. The product is dispatched ready for use.
The certificates guaranteeing that the tests (visual inspection - electrical test - functional test) have been passed are included in specific enclosures.

A.1.4 GENERAL SAFETY RULES

The appliance has been constructed in accordance with the following European Standards:
- **low voltage 73/23-93/68/EEC, in accordance with the following Standards EN 60-335-1:94+A11:95+A1:96 +A12:96+A13:98+A14:98,EN 60-335-2-24:99**
- **electromagnetic compatibility 89/336CEE, in accordance with the following Standards: EN 55014-1:93+A1:97+A2:99; EN 61000-3-2:95+A14:00; EN 61000-3-3:95 + IEC61000-3-3/ A1:01, EN 55014-2:97.**

THE APPLIANCE HAS THE RIGHT TO USE THE NF HYGIENE ALIMENTAIRE MARK. If any alterations are made to the appliance this right will be forfeited.
Information on the **NF HYGIENE ALIMENTAiRE mark:**
- certification body:
  AFNOR CERTIFICATION
  11, Avenue Francis de Pressense' 93571 SAINT DENIS LA PLAINE Cedex-France
- conformity to regulation **NF031**
- the indication that the most important certified characteristics are:
  -cleaning aptitude
  -operating aptitude: performance

A.1.5 CUSTOMER'S RESPONSIBILITIES

The customer must provide an earthed electricity socket of suitable capacity for the input specified on the data plate.
The customer must also provide a magnetothermal switch with a contact opening distance of at least 3mm and a three-pin plug (3P+N+E).
Check that the surface on which the appliance is to be placed is level.

A.1.6 DATA PLATE POSITION

The data plate with all the appliance specifications is located low down on the chilling unit compartment, on the left-hand side.
The plate bearing the appliance's PNC code and serial number is located underneath the logo. At the time of installation, make sure the arrangements for electrical connection comply with that given on the dataplate.

B.1 DESCRIPTION OF CYCLES

B.1.1 POSITIVE BLAST CHILLING

Positive blast chilling brings the food quickly to a temperature of +3°C.
Note that positive blast chilling is suitable for foods that are going to be eaten within a few days.
There are two types of blast chilling:

- **"SOFT" CHILLING**
- **"HARD" CHILLING**

- "soft" chilling is recommended for foods such as vegetables or pieces of food that are not very large or thick.
- "hard" chilling is recommended for larger sized pieces of food.

B.1.2 NEGATIVE BLAST CHILLING OR FREEZING (freezers only)

Freezing allows foods to be preserved for longer periods (weeks or months).
Quick freezing consists of reaching a negative temperature (-18°C) in the centre of the product in the shortest possible time. This ensures that when the product is thawed, the tissues are not damaged and the food preserves its aspect and nutritional ingredients.
With this cycle, the temperature of the food goes down to between -20°C and -18°C when frozen.

B.1.3 MAINTENANCE OR PRESERVATION

The preservation cycle, i.e. the maintenance of the food at a chosen temperature so that it does not alter over time, is started automatically at the end of the blast chilling or freezing cycle.
The preservation is continuous. To interrupt it you have to make changes to the program.

B.1.4 STERILISATION CYCLE (appliances with germicidal light)

The UV lamps have a direct germicidal action and are used to sterilise the surfaces and air in the appliance cell. This function can be used to sterilize kitchen utensils such as knives, carving forks, etc. (to be done in two cycles, turning the utensils around) and can be activated at the end of each working day.
Do not use this function if there is food in the cell.

ATTENTION:

The appliance has a safety device that switches off the lamps when the doors are opened. This safety device is provided because exposure to the U. V. rays emitted by the lamps is harmful and can cause damage to eyes.

C.1 ANALYSIS OF USER INTERFACE

C.1.1 0/1 SWITCHING ON

This button shows if the appliance is on or off. To switch on, press button **1**, the LED **O•1** and all the interface light up.

C.1.2 START/STOP CYCLE

This button starts or stops the selected cycle.
The selected cycle starts immediately when enabled. To stop the cycle, keep the button pressed down for at least 3 seconds.
If the door is closed when a cycle is started the button will light up. If the door is opened during a cycle it will start blinking.
1- In order to optimize appliance performance, and only if the need arises, at the beginning of a chilling cycle a preparation cycle, signalled on the temperature display with the message "PREP", can be started.
2- Also, if the chiller has been inactive for a long time, the compressor will be started by impulses to guarantee maximum efficiency.

C.1.3 SELECT CYCLES

The default setting on the appliance is the SOFT chilling cycle.

Use the button to select one of the following options:

From left to right:
• Positive SOFT chilling
• Positive HARD chilling
• Positive maintenance (or preservation)
• Negative chilling or freezing
• Negative maintenance (or preservation)

When selecting the cycle, press the button to move on to the next option; the options are in a loop and so you can either scroll forwards or backwards.

C.1.4 PROGRAMS

Press the "PROGRAMS" button to set the appliance to programs mode. The appliance switches from standard cycle selection mode to program mode and vice versa.

From left to right:
- Program P1
- Program P2

Associated with each standard cycle are 2 default programs that can be varied by the user.

What is a program? For chilling, the user can change both the cell temperature and the chilling time and save the changes in the memory for subsequent retrieval, and for maintenance the user can set the cell setpoint.

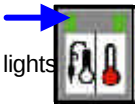
NOTE.

To go from standard cycle selection mode to program selection mode press

To go from program selection mode to standard cycle selection mode press

C.1.5 TEMPERATURE

The temperature display can display both the cell temperature and the core probe temperature.
If **a cycle is running** (i.e. positive or negative maintenance, timed positive blast chilling or timed freezing), the temperature displayed is the cell temperature.
If a **core probe cycle is running**, the core probe temperature will be displayed by default.

Press the button in chilling cycles to switch between cell temperature and core probe temperature.
The indicator light shows which of the two temperatures is being displayed at that time:
- if the core probe temperature is displayed, the CORE PROBE TEMPERATURE INDICATOR LIGHT lights up 

- if the cell temperature is displayed, the CELL TEMPERATURE INDICATOR LIGHT lights up

Only 1 of the 2 can be enabled.

If **a cycle is running** (i.e. positive or negative maintenance, timed positive blast chilling or timed freezing), the temperature displayed is the cell temperature.

C.1.6 TIME

The time display shows the total and remaining chilling time.
The display is enabled only during the running or selection of a blast chilling cycle.
The display is switched off during the setting/running of a maintenance cycle.

The TIMED CYCLE INDICATOR LIGHT lights up only when a timed blast chilling cycle is running.
Set the blast chilling time in the selection stage.

C.1.7 UP/MANUAL DEFROSTING BUTTON

This is a double function button, i.e.:
1) INCREASE VALUE: if you are in 'edit', you can use this button to increase the parameter and setpoint values or to move on to the next parameter;

2) MANUAL DEFROSTING: press the button for at least 4 seconds and, if the appliance is in the right conditions, a manual defrosting cycle will start. The display shows the message "dEfr" throughout the entire cycle.
The selection is enabled only in preservation/maintenance and when selecting the operating cycle.
When the defrosting is finished the system will go back to the main configuration.

C.1.8 DOWN/SET BUTTON

if you are in 'edit', you can use this button to decrease the parameter and setpoint values or scroll back to the previous parameter.

C.1.9 HACCP/HISTORY

For displaying the cell high temperature alarm and the blast chilling cycle end error alarm (see section C.4. for all information on alarms).

ALARM WARNING
When an HACCP alarm occurs, the indicator light
- blinks if the alarm is current
- stays lit if the alarm has ended and the user has not seen it.

C.1.10 SERVICE ALARMS

The SERVICE ALARM function stores and displays all the alarms, except for the cell high temperature alarm and the blast chilling cycle end error alarm (see sections C.4.1 and C.4.1.2 for all information on alarms).

ALARM WARNING
When a service alarm occurs, the indicator light
- blinks if the alarm is current
- stays lit if the alarm has ended and the user has not seen it.

C.1.11 PROBE TEMPERATURES DISPLAY
This function displays the probe temperatures, if there is more than one probe inserted in the product.
If just one probe is used, see section C.1.5 for instructions on how to display the temperature.

C.1.12 STERILISATION CYCLE

(appliances with germicidal light)
The UV lamps have a direct germicidal action and are used to sterilise the surfaces and air in the cell of the appliance (see section B.1.4)
No cycles must be running. When the cycle is running the "TEMPERATURE" display shows the cell temperature. When the cycle is finished the system goes back to the main menu.

C.1.13 FOOD SAFE CONTROL

Signals the appliance's HACCP status.

The FOOD SAFE CONTROL indicator light

switches on with the following colour codes:

RED:
- during a chilling cycle (either timed or core probe).
- at the end of a core probe chilling cycle, if the cycle does not end correctly.
- during preservation/maintenance when a cell high temperature alarm trips.
- in the preservation stage if the process does not end correctly.

GREEN:
- at the end of a core probe chilling cycle, if the cycle ends correctly.
- during preservation/maintenance, if there are no HACCP alarms.

OFF
- appliance in standby.

C.1.14 REFERENCE STANDARD
The machine can be set to 3 different Standards:
1. NF (French)
2. UK (British)
3. CUSTOM (set by user)

THE REFERENCE STANDARD SELECTION CAN BE CHANGED ONLY WHEN THERE IS NO CHILLING CYCLE RUNNING. To make the change, set the parameter "nOr" (see section C.2.2.7 for instructions on enabling the parameter)

The correct end of cycle temperature and time limits in the NF and UK Standards are FIXED and CANNOT BE EDITED by the user, whereas the CUSTOM Standard is user configurable.

Esempio di NSF:
If the NF setting is used, a positive blast chilling cycle with core probe ends correctly if the 10º C temperature is reached within 110'. The chilling then proceeds either until the maintenance temperature set by the manufacturer is reached or the user presses STOP.

Standard	BLAST CHILLERS		
	Chilling start temperature	Chilling end temperature	Chilling time
NF	+63ºC	+10ºC	110 minutes
UK	+70ºC	+3ºC	90 minutes
CUSTOM	**CbSt ºC**	**CCEt ºC**	**CCtI minutes**

Standard	BLAST FREEZERS		
	Chilling start temperature	Chilling end temperature	Chilling time
NF	+63ºC	-18ºC	270 minutes
UK	+70ºC	-18ºC	240 minutes
CUSTOM	**CbSt ºC**	**CFEt ºC**	**CFtI minutes**

See section C.2.2.6 for the procedure for editing the temperature in CUSTOM Standard and see section D.6 for the list of parameters.

C.2 USER INSTRUCTIONS

Before using the appliance, clean the cell with a detergent solution, as there may still be condensation in the cell left over from the final testing by the manufacturers (see section D.1.2 for information on the type of product to use).

C.2.1 SWITCHING ON
Switch on the safety switch upstream and press the **ON** button to start the appliance. The **ON** indicator light lights up to signal that the appliance is powered up.

C.2.2 OPERATION
C.2.2.1 Selecting a standard cycle
The default setting on the appliance is the SOFT chilling cycle.

Use the button to select one of the following options:

From left to right:
• Positive SOFT chilling
• Positive HARD chilling
• Positive maintenance (or preservation)
• Negative chilling or freezing
• Negative maintenance (or preservation)

When selecting the cycle, press the button to move on to the next option; the options are in a loop and so you can either scroll forwards or backwards.

If you want another cycle, keep pressing the button until your chosen cycle is selected and then start the cycle with the button (for further information see section C.1.3 SELECT CYCLES).

IMPORTANT: The appliance recognises it automatically when the core probe is inserted in the product. If the probe hasn't been inserted in the product, a timed cycle will start automatically. It is necessary to wait 2 minutes after the end of the preparation cycle for the automatic recognition (see section C.1.2). Consequently, if a timed cycle starts, after 2 minutes the TIME INDICATOR LIGHT will switch on and the CELL TEMPERATURE will be displayed by default.

C.2.2.2 Selecting a program:
First of all, the user has to decide what kind of cycle to launch (SOFT, HARD, etc.) and then select the program.
Go through the following steps:
• Select the type of cycle;
• Press the program select button the program indicator light lights up
• if the program selected is ok, launch it by pressing the button.

if not
• keep pressing the select button until the chosen program indicator light switches on.
• to launch the program, press the button.

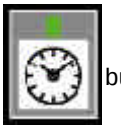
The user can edit some of the cycle parameters and save the changes:

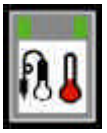
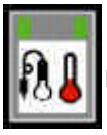
- for blast chilling, the user can edit the cell chilling time/setpoint and save it in the memory, from where it can subsequently be retrieved (see section C.2.2.3 and C.2.2.5).

- for maintenance, the user can set the cell setpoint.

C.2.2.3 Changing the chilling time
The chilling time can be edited in two situations:
1) when setting a program (P1 or P2)
2) when selecting a chilling cycle.

THE CHILLING TIME CAN NEVER BE EDITED WHEN A CYCLE IS RUNNING.

To change the time, proceed as follows:
• press the button for 2 seconds;
• the display blinks to signal that you are in "edit" mode;
• set the value with the two arrow buttons and ;
• either press the  button to confirm the setting, or it will be confirmed automatically if nothing is pressed for 5 seconds.

C.2.2.4 Changing the cell temperature during chilling
In custom cycles only, the setpoint can be changed with the following procedure:
• press the  button for 2 seconds;
• the display blinks to signal that you are in "edit" mode;
• set the value with the two arrow buttons and ;
• either press the  button to confirm the setting, or it will be confirmed automatically if nothing is pressed for 5 seconds.

C.2.2.5 Displaying the temperature setpoint and chilling end time
When a cycle is running, the user can view the temperature setpoint and chilling end time by pressing buttons and simultaneously.

C.2.2.6 Editing the Custom Standard parameters
To edit the temperatures and time in the **CUSTOM** Standard, use the procedure described for editing the USER parameters described in section C.2.2.7

C.2.2.7 Editing USER parameters
To edit a parameter:

• press the and buttons for at least 4 seconds;

the "TEMPERATURE" display shows the parameter label and the TIME display the value label.

• to exit the display function, wait 5 seconds before pressing any buttons.

• press buttons and to select the parameter to be shown on the display;

• press the button for 2 seconds to access 'edit' mode;

• press the and buttons to edit the operating parameter settings.

• either press to save the new setting, or it will will be saved automatically after 8 seconds if no button is pressed.

NOTE: the parameters can be edited ONLY if no cycle is running. If a cycle is running, the utility will enable only the display of the parameters.

C.2.3 BLAST CHILLING/PRESERVATION CYCLE
When the chilling or freezing cycle has finished, the appliance will automatically go into the preservation stage. It is important for the chilled food to be kept in an appropriate way, maintaining a preservation temperature suitable for the type of food chilled.

C.2.4 DEFROSTING
Defrosting is enabled automatically during preservation. The cycle times and the intervals between defrostings are preset by the manufacturer.

- Manual defrosting
To launch a manual defrosting, proceed as follows:

• PRESS THE BUTTON FOR 4 SECONDS.

To shorten the defrosting time, the function can be run with the door open, or a manual defrosting can be launched with the chiller door open; in this way the chiller internal fans will start up to draw air into the cell from the outside, thus shortening the defrosting times.
For further information see section C.1.7
Before each defrosting, remove the drain plug from the bottom of the cell. Replace the plug after defrosting (see section D.1.2).

C.2.5 GERMICIDAL LIGHTS (Function for appliances with germicidal light)
To enable the lights, the appliance must be switched on but with no cycle running. Press the button.

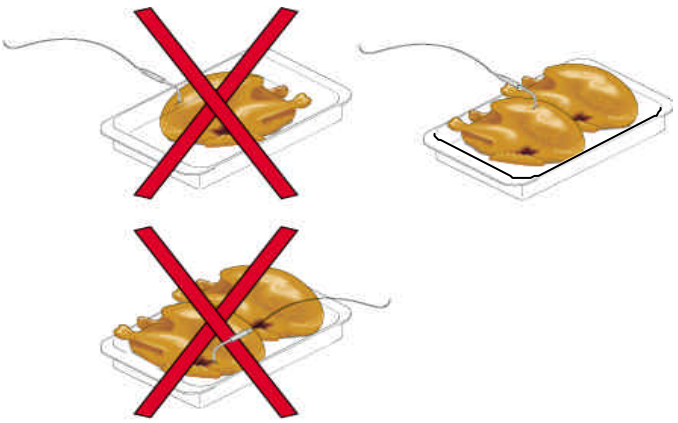
You are advised to run a germicidal cycle at the start of the day before using the appliance, and another one at the end of the day after cleaning the cell.
For further information see section C.1.12
ATTENTION: The cycle will not be enabled if the cell temperature is less than 15°C or if the door is open.

THE EFFICIENT OPERATION OF THE APPLIANCE IN THE BLAST CHILLING AND FREEZING CYCLES DEPENDS ON THE FOLLOWING FACTORS:

C.2.6 PRODUCT LOADING AND UNLOADING
Use kitchen gloves when loading and unloading food. It is not advisable to keep the food covered during the chilling cycle in order to facilitate chilling. An even distribution of the food inside the chamber allows good air circulation and therefore better preservation of the food.
In any case, do not leave the door open longer than necessary when removing or loading food.
At the end of the cycle, open the door and remove the probe, putting it back in its original position (remember that the pans are cold, therefore use gloves).

- Type of tray to be used. You are advised to use shallow trays (i.e. with sides no higher than 65 mm) to allow good air circulation around the product (the greater the surface area of the food exposed to the air, the shorter the chilling time). You are advised to clean the trays and tray support surfaces thoroughly to avoid food contamination. You are also advised to put the food in the chiller in the same tray that it was cooked in.

C.2.7 INSERTING THE CORE PROBE IN THE PRODUCT
Make sure the probe is clean and sterilized whenever inserting it in food, and always take care when handling it because it is a sharp object.
Using the core probe in the chilling cycles guarantees good results. To be certain of this, it is important to position the probe correctly, i.e. right at the centre of the largest piece of food, making sure it doesn't come out the other side and being very careful not to touch the tray.



C.3 STARTING THE OPERATING CYCLES - EXAMPLES

To get the user familiar with the chiller's electronic board as quickly as possible, we have provided a series of step-by-step instructions on how to enable the various user functions.

When switched on, the appliance sets up for the SOFT chilling cycle by default.

You can now select the cycle by pressing the button, according to the following instructions:

- **Hard chilling**:

PRESS THE SELECT BUTTON UNTIL THE

HARD CHILLING INDICATOR LIGHT SWITCHES ON

PRESS THE CYCLE START BUTTON

If the probe hasn't been inserted in the product, the cycle will be timed.

- Hard chilling with chilling end time change:

PRESS THE SELECT BUTTON UNTIL THE

HARD CHILLING INDICATOR LIGHT SWITCHES ON

IF YOU WANT TO CHANGE THE CHILLING END TIME

PRESS THE TIME BUTTON FOR 2 SECONDS,

OR **THEN PRESS THE SELECT BUTTON TO SET THE VALUE**

EITHER THE NEW VALUE WILL BE SAVED AUTOMATICALLY AFTER 5 SECONDS IF NOTHING IS PRESSED, OR YOU CAN CONFIRM BY PRESSING THE TIME BUTTON AGAIN

PRESS THE CYCLE START BUTTON

- Hard chilling with program select:

PRESS THE SELECT BUTTON UNTIL THE

HARD CHILLING INDICATOR LIGHT SWITCHES ON

PRESS THE PROGRAM SELECT BUTTON. THE

SELECT PROGRAM TYPE INDICATOR LIGHT LIGHTS UP

IF THE PROGRAM SELECTED IS OK

PRESS THE CYCLE START BUTTON

IF YOU WANT TO CHANGE THE TYPE OF PROGRAM

PRESS THE SELECT BUTTON UNTIL THE

CHOSEN PROGRAM INDICATOR LIGHT SWITCHES ON

PRESS THE CYCLE START BUTTON

- Hard chilling with program select and chilling time change:

PRESS THE SELECT BUTTON UNTIL THE

HARD CHILLING INDICATOR LIGHT SWITCHES ON

PRESS THE PROGRAM SELECT BUTTON. THE

SELECT PROGRAM TYPE INDICATOR LIGHT LIGHTS UP

IF THE PROGRAM SELECTED IS OK

PRESS THE CYCLE START BUTTON

IF YOU WANT TO CHANGE THE TYPE OF PROGRAM

PRESS THE SELECT BUTTON UNTIL THE

CHOSEN PROGRAM INDICATOR LIGHT LIGHTS UP

PRESS THE TIME BUTTON FOR 2 SECONDS

OR **PRESS THE SELECT BUTTON TO SET THE CHOSEN TIME**

EITHER THE NEW VALUE WILL BE SAVED AUTOMATICALLY AFTER 5 SECONDS IF NOTHING IS PRESSED, OR YOU CAN CONFIRM BY PRESSING THE TIME BUTTON AGAIN

PRESS THE CYCLE START BUTTON

IF YOU WANT TO CHANGE THE CELL TEMPERATURE

PRESS THE TEMPERATURE BUTTON FOR 2 SECONDS

OR **SET THE CHOSEN TEMPERATURE**

EITHER THE NEW VALUE WILL BE SAVED AUTOMATICALLY AFTER 5 SECONDS IF NOTHING IS PRESSED, OR YOU CAN CONFIRM BY PRESSING THE TEMPERATURE BUTTON AGAIN

PRESS THE CYCLE START BUTTON

C.4 ALARMS

C.4.1 ALARMS

The electronic board manages two kinds of alarm system:

- **HACCP** for monitoring and storing high temperature alarms. **HACCP alarm states are signalled by the sounding of the buzzer, the blinking of the red HACCP indicator light and the showing of an alarm message on the display**.

- **SERVICE ALARMS** for storing and managing all the alarms on the electronic board (except the high temperature and blast chilling cycle end error alarms).

C.4.1.1 HACCP ALARMS

For managing the cell high temperature alarm and the blast chilling cycle end error alarm.

If there is no current alarm: the "TEMPERATURE" display reads 'none', and the "TIME" display is switched off.

If there is a current alarm the "TEMPERATURE" display shows the alarm number " **AL 1", AL 2",** etc., and the "TIME" display gives the description of the alarm (see section C.4.1.1.1).

To access the menu, press

to exit the menu, press

again.

use the and buttons to scroll.

The messages "**AL 1**", "**AL 2**", etc. will appear.

After displaying the last alarm, the '— —' message will appear on the alarm display, and if nothing is pressed for 12 seconds the unit will automatically go back to the main menu.

To cancel the alarms, press **+**

together for 5 seconds.

ATTENTION: The reset function is disabled if the operator did not see the stored alarms. When the reset function is enabled the message "RES" appears on the TEMPERATURE display.

C.4.1.1.1 DESCRIPTION OF ALARMS

- HIGH TEMPERATURE ALARM

The display shows:

• the "**Batch** (number) **Ht** (maximum temperature reached) **C Start** Date Time **End —-**", **if the alarm is still active**

e.g. Batch 01 Ht 15C Start 25-10-01 15.48 End — —

• the "**Batch** (number) **Ht** (maximum temperature reached) **C Start** Date Time **End** Date Time", **if the alarm has ended**

e.g. Batch 01 Ht 15C Start 25-10-01 15.48 End 25-10-01 17.48

where:

Start Date Time indicates the start of the alarm, **End Date Time** indicates the end of the alarm ("Date" format: DD-MM-YY, "Time" format: HH.MM;).

- CHILLING CYCLE END ERROR ALARM

This check ensures that a core probe blast chilling/freezing cycle ends correctly.

If a cycle does not end correctly, a **"Chilling time out of limits"** alarm is generated and the display reads:
"**Batch (number) Ot** (chilling time) **MIN Start** Date Time **End** Date Time"

e.g. BATCH1 Ot 120MIN Start 25-10-01 15.48 End 25-10-01 17.48.

where (number) indicates the current day's batch number, Start Date Time indicates the cycle start and End Date Time the cycle end.

WHAT IS A BATCH NUMBER? Each blast chilling cycle (SOFT/ HARD chilling, freezing) will be identified by a progressive number(1,2, …), known as the "BATCH NUMBER". This refers to the current day and will be reset to '0' at the start of each new calendar day.

N.B. There are no cycle end alarms in timed chilling/freezing.

C.4.1.2 SERVICE ALARMS

There are two types of service alarm:
- type **"b"** (user) which do not require service centre assistance (see section C.4.1.2.1) and do not shut down the appliance;

SYMBOL	DESCRIPTION	ACTION
B1	Condenser temperature high	Clean condenser; check air circulation around condenser
B2	Door open	Close door
B3	Memory full	Reset HACCP alarms
B4	Power failure	Check plug properly inserted in power supply socket; Check electrical system

- type **"E"** (non-user) for which you are advised to call the service centre for assistance (see section C.4.1.2.2), but which do not shut down the appliance.

SYMBOL	DESCRIPTION	ACTION
E1	Minimum cell temperature	**CALL SERVICE CENTRE**
E2	Minimum evaporator temperature	
E3	Cell probe malfunctioning or disconnected	
E4	Evaporator probe malfunctioning or disconnected	
E5	Ambient probe malfunctioning or disconnected	
E6	Condenser probe malfunctioning or disconnected	
E7	Core probe 1 malfunctioning or disconnected	
E8	Core probe 2 malfunctioning or disconnected	
E9	Core probe 3 malfunctioning or disconnected	
E10	Pressure switch tripped	
E13	Internal clock malfunction	

C.4.1.2.1 Service alarms not requiring service centre assistance

C.4.1.2.2 Service alarms requiring service centre assistance
When the alarms listed below occur, call the service centre for assistance.
All alarms will be stored as follows: the “TEMPERATURE” display shows the alarm number, e.g. “AL 1”, “AL 2”, etc., whereas the “TIME” display shows the ALARM CODE, e.g. “E1”, “b1”, etc....

If no alarm is active:

When button is pressed, the first alarm, i.e. the last to occur, is displayed.
Press the button again to go on to the next alarm, and so on until all the alarms are scrolled.
After displaying the last alarm, the “—--” message will appear on the display and after 5 seconds the unit will automatically go back to the main menu.
When the next alarm occurs, the current ones will be cancelled (automatic reset).

If an alarm is active, pressing the button will silence the buzzer and simultaneously access the alarm message display.
Press the button again to go on to the next alarm, and so on until all the alarms are scrolled.
After displaying the last alarm, the “— —” message will appear on the display and after 5 seconds the unit will automatically go back to the main menu.
The function for cancelling from the memory is disabled when there are alarms active (i.e. the reset is disabled).

C.5. HACCP CONNECTIONS (ACCESSORIES)

Refer to the handbook enclosed with the kit for instructions on installing the accessories.

The board has a serial communication line for interacting with other units, printers or a HACCP control station in a network.

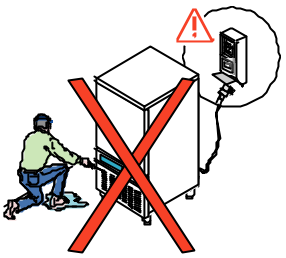
This can be connected in the following ways:
• directly to a device that communicates in TTL (e.g. the FT190ELX printer), by setting the parameter E485=”Prn”
• to an RS485 communications network, by setting the parameters E485=”PC” and using the conversion card RS485-LK-P and Adr=”Network address”.

D.1. ROUTINE MAINTENANCE

D.1.1 PRECAUTIONS FOR MAINTENANCE
Routine maintenance tasks can be performed by non-specialised personnel keeping strictly to the instructions given below. **The manufacturer declines any responsibility for operations carried out on the equipment without following these regulations.**

ATTENTION:

do not touch the appliance if hands and/or feet are wet, or when barefoot. Before any cleaning or maintenance job, disconnect the appliance from the electrical source and carefully unplug the appliance. It is forbidden to remove the safety guards for routine maintenance jobs. Wear protective gloves when cleaning the condenser. Do not use scissors, screwdrivers and sharp objects on the cooling circuit.



D.1.2 CLEANING THE CABINET AND ACCESSORIES
It is advisable to clean the chamber every week; increasing this frequency according to appliance use.

Before using the unit, clean all the internal parts and accessories with warm water and either neutral soap or products that are over 90% biodegradable (in order to reduce the emission of pollutants into the environment), then rinse and dry thoroughly. Do not use solvent-based detergents (e.g. trichloro-ethylene) or abrasive powders for cleaning. Coat the metal panels with protective silicone wax.

Note: Drain off the water used by removing the drain plug at the bottom centre of the cell, so that the liquid flows out into the bowl under the cabinet. This bowl must be emptied periodically.
Refit the drain plug immediately after the cleaning.

D.1.3 CLEANING THE CORE PROBE
Pay particular attention when handling the probe; remember that it is a sharp object, therefore handle it with particular care, even in the cleaning phase.
You are advised to clean the core probe periodically to make sure the appliance works at maximum efficiency.
The probe must be cleaned by hand, using warm water and either neutral soap or products that are over 90% biodegradable (in order to reduce the emission of pollutants into the environment), then rinse thoroughly with clean water and disinfectant solution. Do not use solvent-based detergents (e.g. trichloro-ethylene) or abrasive powders for cleaning.
ATTENTION: do not use boiling water to clean the probe.

D.1.4 PRECAUTIONS IN THE EVENT OF LONG PERIODS OF NON-USE
If the appliance is not going to be used for a long period, take the following precautions :
• Unplug the plug from the electricity mains socket ;
• Remove all food from the cell and clean the interior and the accessories;
• Rub all the stainless steel surfaces vigorously with a cloth slightly dampened with vaseline oil, so as to cover them with a protective film ;
• Leave the door partially open to allow the air to circulate;
• Air the premises regularly.

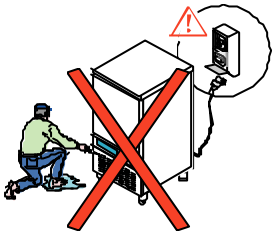
D.2. NON-ROUTINE MAINTENANCE

Non-routine maintenance tasks must be performed by specialist personnel, who can ask the manufacturer to supply a servicing manual.

USE GLOVES AND MASK WHEN CARRYING OUT ANY EXTRAORDINARY MAINTENANCE OPERATION.

ATTENTION:

do not touch the appliance if hands and/or feet are wet, or when barefoot. Before any cleaning or maintenance job, disconnect the appliance from the electrical source and carefully unplug the appliance. It is forbidden to remove the safety guards for routine maintenance jobs. Wear protective gloves when cleaning the condenser. Do not use scissors, screwdrivers and sharp objects on the cooling circuit.



D.2.1 REPLACING THE POWER SUPPLY CABLE FOR MODELS WITH ON-BOARD UNIT

To replace the power supply cable on **20 GN 1/1 (100 Kg) and 20 GN 2/1 (180 Kg) appliances,** proceed as follows:

- disconnect the power supply;
- remove the 2 front panel fixing screws;
- replace the power supply cable;
- refit the front panel in its original seat;
- reconnect the power supply.

REPLACING THE POWER SUPPLY CABLE ON MODELS ARRANGED FOR REMOTE UNIT

To replace the power supply cable on **20 GN 1/1 (100 Kg) and 20 GN 2/1 (180 Kg) appliances,** proceed as follows:

- disconnect the power supply;
- remove the electrical system box protection cover situated on the external top of the appliance;
- replace the power supply cable;
- refit the electrical system box protection cover in its original seat;
- reconnect the power supply.

IMPORTANT: the power supply cable for permanent connection to the mains power supply is of the type H05VV-F (code 227 IEC 53); in the event of replacement, use a cable with at least these characteristics."

NOTE: if the power supply lead has to be replaced, the earth wire must be kept longer than the live and neutral wires.

D.2.2 PERIODIC CLEANING OF CONDENSER

The condenser can be cleaned with a brush, provided the bristles are not in steel or a material that can compromise good operation. Take maximum care not to bend the condenser fins, as this would cause a reduction in the heat exchange.
If the appliance is to work efficiently, the chilling unit condenser must be cleaned at least once every 3 months. If the appliance is installed in a dusty or poorly ventilated environment the filter must be cleaned more frequently, i.e. about once a month.
The condenser is located behind the front slotted panel. To remove it, take out the two screws at the bottom and pull it outwards to release it from the holding clips.

ATTENTION:

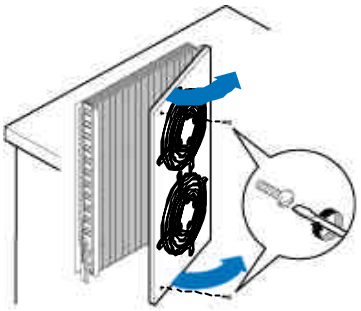
Before removing the slotted panel that protects the condenser, make sure the appliance has been disconnected from the electricity mains.

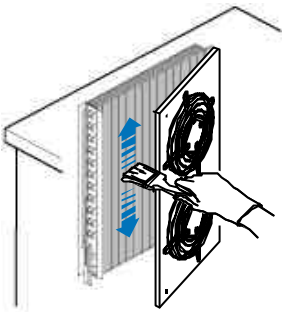
Note: you are advised to use a brush or vacuum cleaner to remove the dirt accumulated on the condenser. Do not use pointed objects, as they may damage the condenser.

ATTENTION: Do not wash the appliance by squirting a jet of water on it.

D.2.3 CLEANING THE EVAPORATOR

Even in this case cleaning can be done with a brush, provided the bristles are not in steel or a material that can compromise good operation of the evaporator. Take maximum care not to bend the evaporator coil fins, as this would cause a reduction in the heat exchange.





To access the evaporator battery, proceed as follows:

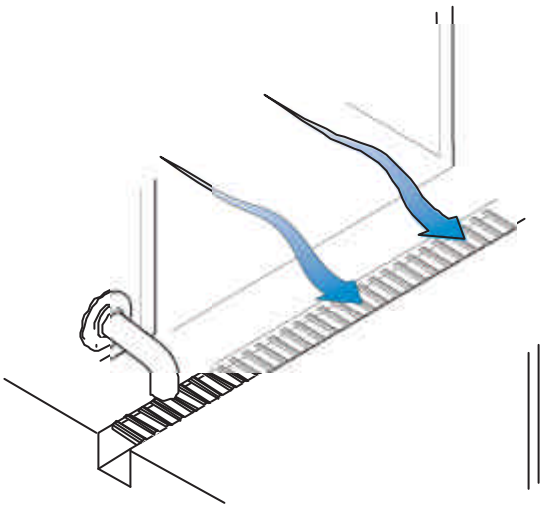
- Disconnect from the power supply;
- Remove any trays from inside the cell;
- Remove the 2 screws (one in front and one behind) that secure the two deflector plates to the evaporator guard;
- Open the inner inspection guard;
- Clean the evaporator battery with a brush or vacuum cleaner;
- Close the guard, refit the deflector plates and reconnect the power supply.

ATTENTION:

Before opening the guard with tools, make sure the the appliance is disconnected from the electricity mains.

D.2.4 EMPTYING CONDENSATION

Periodic emptying of the liquid drain bowl can be avoided by connecting the cell drain "C", located on the evaporator bowl, to a drainage system with the special accessories supplied (bend, union, copper pipe), choosing the most suitable side for draining the condensation. It is advisable to use a floor grate.



The drain diameter is ¾", therefore it is advisable to use a ¾" drain hose.
The drainage course to the open drain must be fitted with a trap, to prevent any backflow from the sewage network reaching the internal pipes in the appliance. Make sure there are no kinks in the hosing or elbows in the metal pipes in the drainage course. Avoid horizontal stretches, where water may collect and stagnate.

D.3. RUNNING PROBLEMS

D.3.1 QUICK TROUBLESHOOTING GUIDE

In some cases faults can be remedied easily and quickly. Below there is a list of possible faults and remedies:

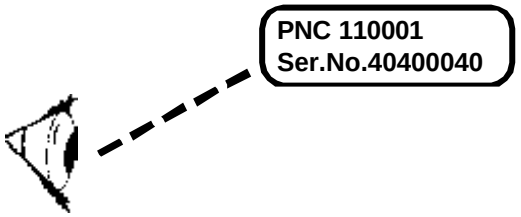
A. The appliance doesn't switch on:
- check that the mains socket is powered.

B. The appliance does not reach the set internal temperature:
- check that the condenser is clean;
- check that the cycles have been set properly;
- check that the product has been loaded properly into the cell;
- check that the probe is working properly.

C. The appliance is excessively noisy:
- check that the appliance is properly levelled. If it is unbalanced this could cause vibrations.
- check that the cabinet is not touching other units, as this may cause resonant vibrations;

If the defect persists after making all these checks, contact the service centre, remembering to give the following details:
• the kind of fault;
• the appliance's PNC (production code);
• the Ser. No. (appliance serial number).

Note: the code and serial number are essential for identifying the type of appliance and date of manufacture.



Example: PNC 110001 00 - Ser.No. 40400040
110001 00: chiller R134a
40400040: manufactured in 2004, week 4, 40 items.

D.4. WASTE DISPOSAL AND DEMOLITION

D.4.1 WASTE STORAGE

At the end of the appliance's working life, make sure it is disposed of properly. The doors must be removed before disposing of the appliance.
Special waste can be stored temporarily whilst awaiting processing for disposal and/or permanent disposal. In any event, the binding environmental protection laws in the country of use must be observed.

D.4.2 PROCEDURE FOR PRELIMINARY DISMANTLING OF THE APPLIANCE

The laws vary from country to country, but the laws and regulations in the country where the demolition takes place are the ones that must be observed.
In general terms, the refrigerator must be taken to specialised collection/demolition centres, after dismantling the components and grouping them together according to their chemical characteristics. Remember that the compressor contains lubricant oil and coolant, which can be recovered and re-used and that the refrigerator components are classed as special waste that cannot be assimilated with urban waste.

ATTENTION:

Make the appliance unusable by removing the power supply cable and any device that closes the internal compartments, to avoid the possibility of somebody getting trapped inside.

THE DISMANTLING MUST BE DONE BY QUALIFIED PERSONNEL.

D.5. ENCLOSED DOCUMENTS

• Set of test documents
• Wiring diagram

D.6 LIST OF USER PARAMETERS

SYMBOL		RANGE	DEF.
MIN	Internal clock: Minutes	0..59	0
HOUR	Internal clock: Hours	0..23	0
DAY	Internal clock: Day	1..31	1
MON	Internal clock: Month	1..12	1
YEAR	Internal clock: Year	0..99	0
SrF	Indicates the cell temperature setpoint for the positive maintenance cycle and preservation stage after positive chilling.	-25..10°C/F	3
SFF	Indicates the cell temperature setpoint for the negative maintenance cycle and preservation stage after negative chilling.	-25..10°C/F	-25
CdiF	Indicates whether the LAC and HAC temperature limits are expressed in differential (d) or absolute (A) mode.	A/d	D
LAC	Temperature delta for preservation/absolute temperature setting under which a low temperature alarm will be generated	-50..125°C/F	5
HAC	Temperature delta for preservation/absolute temperature setting above which a high temperature alarm will be generated	-50..125°C/F	5
SLd	Indicates the duration of the sterilisation cycle	0..240	10
bCCy	Buzzer modes for signalling the satisfactory end of a chilling cycle 'nob' = buzzer off; 'bbl' = buzzer on for 30 seconds; "llb" = buzzer on until any button is pressed	Nob bbl lbl	bbl
bFCy	Buzzer mode for signalling HACCP alarms		bbl
bAll	Buzzer mode for signalling a general alarm		lbl
CCEt	"CUSTOM" Standard: POSITIVE CHILLING END TEMPERATURE	0..CbSt°C/F	10
CCtl	"CUSTOM" Standard: POSITIVE CHILLING END TIME	0..360 min	110
CFEt	"CUSTOM" Standard: NEGATIVE CHILLING END TEMPERATURE	-35..CbSt°C/F	-18
CFtl	"CUSTOM" Standard: NEGATIVE CHILLING END TIME	0..360°C/F	270
CbSt	"CUSTOM" Standard: CHILLING START TEMPERATURE	0..127°C/F	63
tPrA	Indicates the printing interval during a chilling cycle. If set to 0 only the temperatures at the start and end of the cycle are printed.	1..255 min	10
tPrC	Indicates the preservation/maintenance printing interval. If set to 0 no values are printed.	1..255 min	30
Adr	Network address.	01-FF	1
E485	Type of connection: "Prn" = Printer; "PC" = Personal Computer;	Prn/PC	Prn
nOr	Indicates the "NF", "UK" or "CUSTOM" reference Standards	nF, Uk, CuSt	Uk
REL	Software version.	-	-

N.B. The default parameters (DEF.) may vary for different appliance models.